BUY CALIFORNIA INITIATIVE

87 MILLION COMPETITIVE GRANTS PROGRAM

The Buy California Initiative also includes a \$7 million competitive grants program to aid specialty crop growers. Specialty crops are defined by Congress as "any crop ... except wheat, feed grains, oilseeds, cotton, rice, peanuts, and tobacco." As CDFA officials listened to growers' and producers' priorities and suggestions at hearings throughout the state in October 2001, the department heard very clearly that there are a lot of innovative ideas for projects that would benefit smaller segments of the industry. Among the ideas were several very complete proposals for local research or marketing projects.

CDFA couldn't possibly fund all of these ideas with this finite program, but the department set aside approximately \$7 million for this competitive program. Response has been overwhelming, with over 700 requests for applications. A panel of agricultural specialists carefully screened and scored each proposal before sending their recommendations to CDFA Secretary William (Bill) J. Lyons, Jr. The following 51 proposals have been chosen for funding, and have generated an additional \$3,602,642 in matching or in-kind contributions.

Agricultural Literacy Project: Cal Poly San Luis Obispo, \$280,000

This project builds on Cal Poly's development of a new curriculum guide for agricultural literacy, in cooperation with the Ag Network and Ag in the Classroom. The goal of the project is to familiarize teachers with the new guide so they can integrate agricultural education with core subjects (math, science, English, history) in K-12 classrooms statewide. The Cal Poly Department of Agricultural Education and Communication will develop and enact a plan to distribute the new guide using a Web site, introductory materials, workshops, seminars and in-service meetings. The staff and cooperating nonprofit groups have invested significant time and effort in the development of the curriculum, and are offering \$294,888 in matching contributions of funds, staff time and other costs to see the project through the critical dissemination phase. Project supporters include the San Luis Obispo County Office of Education, California State Superintendent of Public Instruction Delaine Eastin, the California Foundation for Agriculture in the Classroom, and the Agricultural Network.

Farm Worker Safety: C.S.U. Fresno, \$280,000

The "Farm Worker Motor Vehicle Safety Education Project" is supported by local growers, farm labor advocates and worker safety groups. The project will provide an aggressive public education campaign on motor vehicle safety targeting the monolingual Spanish-speaking farm-worker population in Fresno and Tulare counties. The project's goal is to reduce the number of motor vehicle crashes, fatalities and serious injuries suffered by farm workers and other rural residents. Rollout of the outreach effort is planned for spring/summer 2003. This proposal is supported by the Nisei Farmers League, the California Tree Fruit League, Ag Safe, and Farm Labor Contractors for Safety and Compliance.

Sustainable Winegrowing Practices: Wine Institute & California Assn. of Winegrape Growers, \$280,000

An industry-sponsored effort began in November 2000 to develop a "code of sustainable winegrowing practices," with a goal of encouraging voluntary adoption of high standards of stewardship and crop management by growers. This grant enables the group to complete its work on the code, produce and distribute a self-assessment workbook, build a measurement system, and publicize the program. Success with this project could easily be extended to table grape and raisin growers as well. The Wine Institute pledges \$200,000 in matching funds to cover additional costs of implementation; \$169,000 in consultant services and \$238,000 in in-kind contributions to develop the code are also leveraged by this grant. The Wine Institute is an association of more than 605 California wineries and affiliated businesses that represent about 92 percent of California wine shipments and 80 percent of all U.S. wine shipments. The project enjoys broad support from industry associations and wineries throughout the Golden State.

Support for "California Heartland" TV Program: KVIE, \$275,000

This public broadcasting program has covered agricultural topics since 1996, but faces a funding shortfall. This grant, along with \$768,032 in matching funds from other sponsors, will help maintain the program for the coming year. The funds will also support an associated searchable Web site. The segments of this program provide a wide-reaching educational message about the value and importance of agriculture in California. Weekly viewership is estimated at 800,000. Support letters for this grant were received from the California Avocado Growers, the California Canning Peach Association, the California Grape & Tree Fruit League, Blue Diamond Growers, Sunkist Growers, California King Salmon, Cal Poly Pomona School of Agriculture, the Southland Farmers Market, and individual growers and citizens.

Education/Outreach Activities: Alliance for Food & Fiber, \$250,000

This proactive outreach project includes a collaboration with the California Foundation for Ag in the Classroom to create a teacher's guide on food safety and a corresponding section on the organization's Web site. The project also includes outreach to dieticians through the California Dietetic Association, production of a food safety information card, and activation of a toll-free food safety hotline. The alliance, a coalition of 60 general ag and commodity organizations representing over 100,000 growers, has committed \$180,000 in matching funds.

Pest Management Strategies for Olive Fruit Fly: California Olive Committee, \$250,000

This research project seeks to determine seasonal population dynamics of the olive fruit fly in California, and to use the information to develop a model to predict changes in the population so that growers may effectively time their pest management activities in olive orchards. The olive fruit fly was first discovered in California in 1998 and has spread to all areas of the state where olives are grown. Because there is low tolerance for damage for both table olives and those used for oil, it is critical that pest management strategies be developed for this pest. More than 40 growers and agricultural organizations submitted letters of support for this project, exhibiting support not only from the olive growing and processing community, but also from academia, local governments and groups representing multiple commodities.

Educational Programs for New Agricultural Wing at the National Steinbeck Center, \$250,000

The National Steinbeck Center has quickly become a jewel of the Central Coast community. This project will contribute three educational programs at the center's newly created Ag History and Education Center in Salinas. The center's staff will create and host (1) an "Ag Academy" to attract high school students to the agriculture profession; (2) the "Ag-Econ Challenge," an interactive computer program accessible on the web and designed to teach high school students about the economics of raising crops; and (3) the "Ag Forum" aimed at providing speakers for the general public on agricultural issues. Members of the local agricultural community have raised over \$16.6 million in private donations for the center's construction. Supporters of this grant include the Grower-Shipper Association, State Senator Bruce McPherson, C.S.U. Monterey Bay, the Monterey County Agricultural Commissioner, the Mission Trails Regional Occupational Program, Mann Packing Co., Inc., and local growers.

Agricultural Exhibits at the Learning Center: International Agri-Center, Tulare, \$250,000

The "Learning Center," housed at the International Agri-Center in Tulare, will develop museum-quality, hands-on, indoor and outdoor exhibits; a demonstration farm; curriculum and classroom materials; and an aggressive marketing campaign. With over 23,000 youths visiting the center over the past 18 months, the potential for delivering targeted agriculture education messages via this project is promising. The grant will be aided by in-kind contributions of \$150,000. Supporters include Tulare County Agricultural Commissioner Gary Kunkel, the California Minor Crops Council, the Tulare County Farm Bureau, the Tulare County Office of Education, The Tulare-Kings Hispanic Chamber of Commerce, California Women for Agriculture, the California Farm Water Coalition, the California Asparagus Commission, the Olive Growers Council of California, the Economic Development Corp., and several local growers.

Economic Impact of Citrus Industry in California: California Citrus Mutual, \$225,000

Economic analysis of the benefits of citrus farming to California will be used to develop an industry outreach program, to be piloted in the San Joaquin Valley. By developing sound economic data and disseminating it to consumers and the decision-making audience, the project seeks to provide information that Californians need to make wise choices regarding the future and value of agriculture. The educational program also will include consumer kits, videos and a Web site. If the pilot is successful, the industry will carry the message to other markets. Citrus Mutual will provide \$31,000 in matching funds. Partners include the U.C. system (analysis/report) and private firms (outreach/video).

Alternatives to Methyl Bromide: California Strawberry Commission, \$200,000

Despite ample research for several years, non-chemical alternatives to methyl bromide have yet to give consistent results. With the 2005 phaseout of this fumigant fast approaching and a 70 % phase-down coming in 2003, the best short-term solution is to focus on the most promising alternatives. Prior research has identified a handful of products tested in varying conditions. This research project will test these alternatives under actual production conditions so growers can refine application methods to make the alternatives usable under commercial conditions and acceptable under pesticide regulatory requirements. California's strawberry crop represents 83% of the nation's total.

Mitigation of Nursery Runoff: U.C. Riverside & Orange County, \$200,000

This two-year project will begin with field research at a 120-acre nursery near Irvine to define the pathways and fate of pesticides in runoff from greenhouse operations. The data will be used to develop and disseminate environmental mitigation practices that all nursery operators can use to control runoff and meet state and federal total maximum daily load (TMDL) standards.

Soil Carbon Sequestration: Kearney Foundation & U.C. Davis, \$175,000

This cooperative effort will help develop the cutting-edge tools and information needed to implement soil carbon sequestration for specialty crops. Increasing the carbon in soils provides agricultural and environmental benefits such as improved water capacity and retention, infiltration rates and soil health; reduced erosion and reduced input of pesticides and other treatments for production. By developing this ability, specialty crop agriculture may also take advantage of an emerging carbon credit market. This grant creates a repository of funds to support several projects, with matching funds of \$200,000 to be provided by the Kearney Foundation. Project supporters include the California Association of Family Farmers, the Kings County Cooperative Extension, and the California Energy Commission.

New Crop Development: U.C. Regents (Collaboration), \$150,000

A collaborative effort by farm advisors and academic specialists would perform research and outreach on niche crops such as blueberries, chili peppers, edamame, tomatillos, oca and water chestnuts. Extension specialists at various research stations will screen for adaptability of the crops and will also consider post-harvest and marketability factors, including consumer acceptance. This project primarily benefits smaller farmers aiming for niche markets. The proposal explains that these crops are farmed primarily by small farmers accounting for more than 80% of California's growers. The U.C. system will provide in-kind contributions of \$32,600. Project supporters include USDA's National Program Leader for Small Farms, the Davis Farmers Market, the Hmong American Community, Inc., the California Fuyu Growers Association, the Agricultural Society of San Diego, and several individual growers, packers and processors.

Lettuce Disease Research: U.C. Davis & USDA Cooperative Extension (Salinas), \$150,000

California annually produces 70-75 % of the U.S. lettuce crop, with a farmgate value of approximately \$1.5 billion. The sudden appearance of verticillium wilt on lettuce poses a serious threat to California growers. Despite attempts to control the disease (*V. dahlia*), it has spread into the Salinas Valley. Yield loss in affected fields approaches 100%. Control methods of fumigation and/or crop rotation are expensive or ineffective. Breeding for resistance is the most promising long-term control strategy. This project will seek sources of disease resistance and attempt to incorporate them into commercial cultivars. The California Lettuce Research Board has earmarked \$70,000 in matching funds.

Floral Market Development: California Cut Flower Commission, \$150,000

California is the source of approximately 65% of the United States' fresh-cut flowers and foliage, with an annual farmgate value of \$330 million. Growing global competition in the floral market generated this proposal, which will educate retail florists and consumers about California's specialty flower producers. This promotional effort will give growers and buyers a complete resource for initiating and completing transactions for cut flowers and foliage. Considering the 50% turnover rate among retail flower shop workers, the concept of sustained, repeated education should help California growers maintain and increase their current 20% market share. Support was voiced for this project by the California State Floral Association and several nursery growers and floral companies.

Grower Education–Agricultural Rules & Regulations: State Center Community College District, \$150,000

New and changing rules, laws and regulations involving labor, housing, transportation and the environment present an ongoing challenge for farmers. This project will offer twice-yearly seminars to an estimated 1,000 growers. Collaborators include Sun-Maid Growers and the Nisei Farmers League. The goal of the pilot program is to reduce violations and improve farming operations. The project will generate an in-kind contribution of \$11,590. Grant supporters include the Raisin Bargaining Association, the Nisei Farmers League, and Sun-Maid Growers.

New Sensor for In-Field Evaluation of Fruit Quality: U.C. Davis, \$150,000

This cutting-edge project will develop a new sensor, based on magnetic resonance technology, to enable growers to evaluate fruit damage and other quality characteristics in the field. The device would allow rapid detection of the onset of freeze, mold, over-maturity and other factors useful for determining harvest timing, reducing waste, and maximizing crop quality and value. Consumers will enjoy higher-quality fruit, growers will gain a valuable new tool, and California's citrus producers will improve their competitive standing in the international market. This grant will leverage an additional \$200,000 in research and development funds from its cooperators: Citrus Research Board, Fresh Express, Paramount Citrus Association, and Quantum Magnetics.

Pre-Inspection/On-Site Inspection of Apple Exports to Mexico: California Apple Commission, \$150,000

Mexico's largest consumer markets such as Mexico City, Monterrey and Guadalajara have an existing demand for California apples. California's grower community has developed relationships with supermarkets in Mexico and needs this program to enable the transfer of their shipments across the border. The grant will develop a pre-inspection/on-site inspection program and fund a coordinator in Mexico to initiate the export process. This program will create immediate shipments of apples into Mexico, and could lead to similar programs for additional commodities. Shippers will contribute the costs of cold-storage facilities, and annual costs of approximately \$110,000 would revert to the industry in the third year of the project and beyond. This project has gained the support of the California Technology, Trade and Commerce Agency and the American Embassy's Agricultural Trade Office.

Field Test Automatic Weed Control System: U.C. Davis, \$150,000

For organic farmers and those seeking to reduce chemical use in their fields, weed control is often cited as a primary obstacle. This pilot project will field test an automatic system to control weeds using a tractor-mounted system with precise video and Global Positioning System (GPS) guidance to locate weeds, triggering a precise dispenser to apply either organic herbicides or hot liquids to control weeds thermally. The California Tomato Research Institute and Small Planet Foods, an organic subsidiary of General Mills, have expressed their support of this project.

Citrus Peelminer Control: U.C. Riverside, \$150,000

The citrus peelminer is a native insect in California that, until recently, lived up to its name by sticking primarily to citrus. During the past two years, though, it has expanded its "host range" to include grapes, cotton, beans, peppers and ornamental nursery plants. This grant will benefit a wide array of growers, and will generate in-kind funding of \$235,734 from cooperating organizations such as the university's Cooperative Extension and the agricultural commissioner's office. Growers and researchers have identified this complementary set of projects to study the biology of the pest, develop a pheromone for pest management, implement a biological control program and develop a GIS mapping component to track pest presence and concentration in crops. This project is supported by the Fillmore-Piru Citrus Association, the California Table Grape Commission, Sunkist, Bee Sweet Citrus, Inc., and several other growers.

Food Safety Program for Avocado Production: California Avocado Commission, \$150,000

With this pilot project, the California avocado industry aims to ensure and demonstrate that its commodity is produced under conditions and processes known to minimize the risk of microbial contamination. The program addresses both growing practices and handling processes during production, harvest and transportation. Growers and industry representatives support this concept, which will provide an excellent marketing tool while assuring consumers of the safety of this agricultural product. Other commodity groups could follow the example of this program and realize similar benefits.

Trade Law Protections for Import-Sensitive Crops: C.S.U. Fresno, \$150,000

This research grant will identify current and potential California specialty crops whose marketability may be lessened by increasing foreign imports. The pilot project will identify various options under current international trade law and suggest new alternatives to protect import-sensitive crops. Industry support from organizations such as the Grower Shipper Association, the California Grape and Tree Fruit League, the California Asparagus Commission and others indicates broad agreement that this emerging issue merits prompt and focused analysis.

Marine Stewardship Council Certification for Salmon Fishing: California Salmon Council, \$125,000

This pilot project seeks to certify California Chinook "King" salmon fishing as sustainable under guidelines established by the Marine Stewardship Council. By meeting these requirements, California salmon fishermen and marketers selling California-caught wild salmon would gain access to national and international markets that have been systematically closed. Alaska's state government underwrote a similar certification project in 1999. The World Wildlife Fund and the Pacific Coast Federation of Fishermen's Associations support this project.

Environmentally Sound Agricultural Practices: U.C. Sustainable Agriculture Research and Education Program (SAREP), \$100,000

This pilot project will assist producers of dried plums, walnuts, citrus and forage crops in adopting economically and environmentally sound agricultural practices. By taking advantage of tools already developed and validated by a core group of growers, this project offers an excellent opportunity to enhance adoption of sustainable practices. The proposal includes a farmer-to-farmer outreach initiative, creation and refinement of key educational tools, and assessment of the effectiveness and impact of the outreach efforts. The project will generate \$106,839 in matching funds. The project received letters of support from many growers, as well as the California Dried Plum Board, the Walnut Marketing Board, Western United Dairymen, and the Community Alliance with Family Farmers.

Expanded Agricultural Resource Center: Monterey County Ag Education, Inc., \$100,000

Building on a proven successful local program, this project will enable the Ag Resource Center operated by Monterey County Agricultural Education, Inc. (a nonprofit) to expand its current educational offerings to thousands of K-12 students each year. The resource center's materials and programs will also be made available to students and teachers in other areas through a new Web site. Letters of support for this project poured in from elected and appointed representatives including Monterey County Agricultural Commissioner Eric Lauritzen, Monterey County Supervisors Judy Pennycook and Louis Calcagno, and Monterey County Superintendent of Schools W.B. Lindley; U.C. Cooperative Extension, and growers and farming organizations including the Grower-Shipper Assn. of Central California, the Monterey County Farm Bureau, American Ag Credit, California Women for Agriculture, Snow Seed Company, D'Arrigo Brothers Company, Mills, Inc., Valley Farm Management, and Mann Packing Co.

Web Site Update and Manuals for Organic Growers: U.C. SAREP, \$100,000

The Sustainable Agriculture Research and Education Program (SAREP), based at the University of California's Davis campus, will expand and redesign its Web site for organic growers, including providing updates on the new national rule for organic farming. The program will also develop organic production manuals for strawberries, olives, winegrapes, vegetables, artichokes and small-scale organic farming. SAREP has developed partnerships with organic farming organizations and has earned the confidence of the industry as a source of reliable research and recommendations for growers, making it an ideal provider of the proposed information. Project supporters include California Certified Organic Farmers, the Organic Materials Review Committee, the Organic Farming Research Foundation, and the California Organic Food Advisory Board.

Citrus Tristeza Genetics: U.C. Davis, \$100,000

Advances in genetic work have now made it possible to pursue a new method of controlling diseases such as citrus tristeza. Researchers will employ cutting-edge procedures to modify plants' natural defense mechanisms and produce trees that are resistant to the disease. Currently, only partial control of citrus tristeza is possible by using certified rootstocks and through vigilance to remove infected trees. This project seeks to provide a new alternative for growers seeking better control methods. Project supporters include the California Energy Commission, the Community Alliance with Family Farmers, and U.C. Cooperative Extension.

Feasibility Study of Peach/Pear Fruit Cups in Schools: California Cling Peach Board/Pear Advisory Board, \$100,000

The California canned fruit industry is struggling to compete against lower-cost imported fruit. The California Cling Peach Board will partner with the California Pear Advisory Board to study the feasibility of getting peach, pear and mixed fruit cups into school lunch programs in California. Success with this project could open the door for additional commodities. The pilot project carries both nutritional and economic benefits, and enjoys broad support from growers and industry groups, local elected officials, university researchers and academia. A successful study could generate a new and focused effort by these growers/producers to provide nutritious fruit servings to K-12 schools. Project supporters include the California Farm Bureau Federation, the California League of Food Processors, Del Monte, and California Pear Growers.

Genetic Mapping to Improve Breeding of Asparagus Varieties: U.C. Riverside, \$100,000

This cutting-edge pilot project will develop genetic maps in crosses between Californian and European asparagus plants. The goal is to provide information that will allow growers and researchers to more efficiently breed new asparagus varieties to increase yield and marketability of the crop. The resultant new varieties would make our growers more competitive in both the domestic and world markets. Advancements achieved in this project could lead to similar efforts for other commodities. The project is supported by the California Asparagus Commission.

Milk Vending Machines Pilot Project at Turlock High School: Margaret Souza, \$100,000

The project will provide vending machines offering "chugs," the new single-serving milk containers, in several flavors to high school students at Turlock High School, then to other Stanislaus County schools if the project is successful. Increased milk consumption would help address the "calcium crisis." The project shows promise for the youth market, which has responded well to the new "chug" containers and flavored milks. This pilot project is aided by the donated services of a project manager, as well as time and effort donated by the local Future Farmers of America chapter (an estimated in-kind contribution of \$30,000). The project is supported by the California School Food Service Association, the California Milk Advisory Board, the Dairy Council of California, Yosemite Farm Credit and Foster Farms Dairy.

Develop New Potato Varieties, Production Practices, and Packaging: U.C. Davis, \$100,000

The California potato market has slowly decreased in acreage and number of growers in recent years. To reverse this trend growers need new and better varieties, management guidelines to produce the new varieties, and assistance with postharvest handling and packaging to better market these potatoes to the public. This pilot project will develop new varieties by expanding an existing program underway at U.C. Davis' labs. Researchers also will provide recommended management practices to optimize production, and will develop packaging systems to improve marketability. Supporters include the Kern Produce Shippers Association, the Newell Potato Cooperative, and the California Potato Research Advisory Board, as well as California Oregon Seed, Inc.

Table-Ready Packaging for Wild Rice: California Wild Rice Growers Association, \$100,000

This project will develop and deliver a quick, easy, healthy group of wild rice meals and side dish alternatives, with the goal of adding value to the wild rice produced in economically depressed eastern Shasta County. The project carries nutritional benefits for consumers, and is also expected to provide long-term economic benefit to the wild rice growers working cooperatively as "Fall River Wild Rice." The packaging and marketing of this product could lead to similar projects for other agricultural commodities as producers consider seek to make their products more palatable and convenient for consumers. Project supporters include Shasta County Supervisor Glenn Hawes and Agricultural Commissioner Mary Pfeiffer, as well as several individual growers.

Shelf Life of New Peach/Plum/Nectarine Cultivars: U.C. Davis, \$100,000

Researchers will evaluate the shelf life of new nectarine, peach and plum cultivars and characterize these new cultivars with respect to two major flavor components: concentrations of soluble solids (sugar) and acidity. If successful, the pilot project will enable growers and producers to tailor specific varieties of these fruits according to consumer preferences in focused domestic and international markets. Other fruit and vegetable commodities could also adapt this project to achieve similar succeses. This project complements research already funded by the California Tree Fruit Agreement and the California State University Research Initiative. Project supporters include the California Tree Fruit Agreement and Summeripe.

"Agademics" Program for $5^{ m th}$ and $6^{ m th}$ Grade Students: Orange County Fair & Exposition Center, \$100,000

Agademics provides a free, one-day ag educational experience for 5th and 6th grade students at a state-of-the-art working farm exhibit on the grounds of the Orange County Fair and Exposition, which provides a steady stream of over 900,000 visitors annually. Lessons include plant and soil science, animal husbandry, the food pyramid, nutrients from fruits and vegetables, and California's role in agriculture. This grant will enable the already proven program to enhance the program's messages and expand outreach over the next two years.

Promotional Campaign for SoCal Farmers' Markets: Southland Farmers' Market Assn., \$100,000

Certified farmers' markets are increasingly important to many small, specialty crop farmers who rely heavily upon direct marketing. Markets and their traditionally nonprofit sponsors rarely have the resources or marketing experience to effectively develop effective promotional campaigns. The Southland Farmers' Market Association is a nonprofit membership organization that represents 22 certified farmers' markets and 350 specialty crop growers. This pilot project will allow the association to create a regional campaign to introduce Southern Californians to specialty crops available at their local farmers' markets. The markets will be asked to offer matching funds on a sliding scale to maximize the yearlong effort, leveraging an estimated \$50,000 in additional funds.

Food Safety for Melon Producers/Handlers/Processors: California Melon Research Board, \$100,000

California ranks first in the nation in cantaloupe and honeydew melon production. Producer groups have embarked on a series of research projects in recent years to improve food safety efforts by producers, handlers and processors. This pilot project would complement those efforts and expand outreach efforts to educate consumers about the importance of safe handling, storage and preparation of melons. Issues such as worker health and hygiene, transportation, storage, and distribution are among the proposed topics for further research. This project could easily be tailored to fit additional industries and commodities in the future. The California Melon Research Board is joined by the California Cantaloupe Advisory Board in support of this project.

Electronic Benefits Transfer (EBT) for Food Stamps at Farmers' Markets: DHS WIC Supplemental Nutrition Branch, \$100,000

Within three years, paper food stamps will be phased out in favor of electronic debit cards. Farmers' markets must prepare now for this technological change. This pilot project will determine the best method of allowing food stamp recipients to pay at farmers' markets with electronic benefits transfer cards. A successful project could produce a solution for all of California's farmers' markets with sufficient time to implement the changeover before the debit card program arrives. Supporters include the California Wild Rice Assn. and California Certified Farmers Markets.

Developing the School Food Service Market: Community Alliance with Family Farmers, \$100,000

This pilot project will develop networks in five regions of California to encourage schools to buy locally grown produce. The long-term goal is to have a statewide network of food producers, distributors and institutional buyers linked in support of California-grown products. Regional coordinators will develop databases of local farmers' products and price histories, then work with school districts to identify and minimize financial and other constraints. Coordinators will evaluate the available local commodities and match them to demand at local schools. Project supporters include the California Institute for Rural Studies, the California Sustainable Agriculture Working Group, Sustainable Agriculture Education, the Davis Farmers Market, and individual growers.

Agricultural Policy Seminars: Cal Poly SLO, \$76,000

Cal Poly will provide \$97,131 in matching funds and indirect costs to more than double this grant. This project will create a 10-week ag policy seminar for college students, working closely with the agricultural community and government to present a wide range of perspectives on relevant agricultural issues such as pest prevention, labor, workers' compensation, water, and air quality. Participating students will be required to perform research and analysis of each topic, and would complete the seminar with a 2-3 day trip to Sacramento. A second course in agricultural policy resolution will serve as a "capstone course" for agribusiness students, who will choose an issue and identify the best mechanisms to implement the appropriate policy. The classes would be offered in two quarters. Project supporters include Pacific Coast Producers, Mission Produce, Inc., and Talley Farms.

School Field Trips to "AgriScapes" at Cal Poly Pomona, \$75,000

Building on the recent creation at Cal Poly Pomona of AgriScapes, a 40-acre "farm in the city," this pilot project will bring K-6 students to visit the facility and learn about the importance of agriculture. The proposal also includes elements such as a spring Family Five-A-Day Festival and Produce of the Month at Cal Poly's Farm Store. Visitors—as many as 15,000 a month—come from a densely urbanized part of the state where information and positive messages about agriculture's role in society will be most informative. Cal Poly has committed \$140,000 in matching funds, and Western Growers Association has offered an additional \$6,000 contribution. Project supporters include the Western Growers Association, the Fresh Produce and Floral Council, and the California Kiwifruit Commission.

Health Benefits of Table Grape Phytonutrients: California Table Grape Commission, \$75,000

American consumers are concerned about the nutrition and health attributes of the foods they eat. Advancing scientific understanding of California grapes and their contributions to health will lead to increased demand for this important agricultural product. This grant, with matching funds of \$179,128 from the association and cooperating organizations, will expand an ongoing, small-scale research program currently conducted by the commission. The program focuses on nutrition research, such as a recent project that exhibited the powerful effect of reservatrol, a little-known compound found almost exclusively in grapes, on cancer and other conditions.

High-End Market Feasibility Study for Beef Producers: High Sierra Resource Conservation & Development Council & University of California Cooperative Extension, \$70,000

Traditionally, ranching families in the northern Sierra Nevada have had few, if any, opportunities to market beef directly to consumers, primarily due to consolidation in the beef processing sector. At the same time, recreational opportunities in the region attract a substantial number of visitors and demand for various high-end specialty products, including meals. The High Sierra Resource Conservation and Development Council and the University of California Cooperative Extension seek to address these conditions simultaneously by conducting a feasibility study and developing a business plan to develop high-end marketing opportunities for the region's beef cattle producers. The project will assist local ranchers in marketing premium ground beef to consumers through area resorts, restaurants and retail outlets. Project supporters include Placer County Agricultural Commissioner Christine E. Turner, U.C. Cooperative Extension (several offices/locations), the C.S.U. Chico College of Agriculture, the Tahoe Cattlemen's Association, USDA Rural Development, Yuba-Sutter Cattlewomen, and Nevada County Agricultural Commissioner Paul Boch.

Controlling Root-Knot Nematode: U.C. Riverside, \$66,000

Root-knot nematodes have traditionally been controlled in high-value crops with fumigant nematicides such as methyl bromide. Phase-out of this product and restrictions on fumigant use generally have brought on an urgent need to develop and evaluate economically viable and sustainable methods of controlling nematode damage. This project will identify effective, commercially available mycorrhiza products (soil-inhabiting fungi that work with crops' root systems to inhibit nematode damage). In greenhouses, researchers will screen 15 products to determine the degree of the fungi's colonization, effects on plant damage, symptom development, and root-knot nematode multiplication. The two best products will then be analyzed under field conditions. This project could provide crossover benefits to other high-value crops. Project supporters include the Melon Research Board and the California Tomato Commission.

School Garden Program: The Agricultural Network, \$50,000

The Ag Network will use this grant to enhance and expand its statewide program teaching students about various specialty crops through school garden programs. The project seeks to provide a steady source of ag curriculum to school gardens through a Web site, including materials and messages such as the current "Farming is Food, Fiber, Flowers and Fun," workbooks, resource guides, etc. New curriculum components on nutrition and integrated pest management are planned. This pilot project has a demonstrated history of success through collaboration with the Department of Education, the Waste Management Board, the U.C. and C.S.U. systems, the Chamber of Commerce, University Extension Service, the FARMS Leadership Program, the Huntington Library, the Community Alliance with Family Farmers and other organizations.

Ag Education Program for Non-Ag Students/Teachers: FARMS Leadership, Inc., \$50,000

FARMS Leadership, Inc. is a leadership program for high school students modeled after the Ag Leadership Program. Approximately 270 non-ag students and their teachers participate each year in an experiential outdoor education and leadership program designed to increase understanding of agriculture in a predominantly urban population. This grant would enhance the existing program and seek to add school districts not already participating. Project supporters include the U.C. Davis Vegetable Research and Information Center and Student Services and Outreach office, the Davis Joint Unified School District, Farm Advisor Rachael Long (Yolo), Yolo County Supervisor Lois Wolk, the South Coast Resource Conservation and Development Council, the Greater San Diego County, Yolo County and Uulatis Resource Conservation Districts, the Agriculture Education Committee, the Cal Poly Sustainable Ag Resource Center, former USDA Deputy Secretary Richard Rominger, Butte College, and the California Dept. of Education.

Promoting Wildlife-Friendly Vineyard Practices: California Assn. of Winegrape Growers, \$46,000

Winegrape growers in California have developed various on-farm practices that benefit wildlife while contributing to the grape-growing process. With this grant, the California Association of Winegrape Growers will produce and distribute a publication highlighting these successful practices, with the goal of encouraging additional growers to implement the measures and to educate their local growers and communities about the economic and environmental compatibility of these new ideas. The focus of the publication would be on wildlife issues in grasslands, oak woodlands, valley floor habitats, and marine and riparian habitats. This grant is in addition to in-kind contributions of \$22,350 from CAWG and funds from Wine Vision, National Fish and Wildlife and a Great Valley LEGACI grant.

Food Safety/Quality Assurance Program for Poultry: Pacific Egg & Poultry Association, \$31,000

The California Egg Quality Assurance Plan is a voluntary preharvest food safety program designed to ensure product quality and safety associated with salmonella and chemical residues in eggs. The program outlines 20 core components, which form the basis of a Hazard Analysis Critical Control Points (HACCP) plan. Training, record keeping and research are integral parts of the plan. This grant will cover about half of the annual cost of the program, matching approximately \$31,000 from other funding sources. Project supporters include U.C. Cooperative Extension poultry specialist Ralph A. Ernst, the California Grain and Feed Association, Pacific Compliance Services, and the California Egg Industry Association.

"Agriculture Day" for 1200 Youth: San Luis Obispo County Agriculture Education Committee, \$24,000

This grant will enable the committee to develop and host a one-day event with 42 third- and fourth-grade classrooms, to be held at the California Mid-State Fairgrounds in Paso Robles. Teachers will introduce an agricultural curriculum into their classes prior to the event. Students will cycle through agricultural presentations including speakers, demonstrations and hands-on "make-and-take" projects. The project is aided by in-kind contributions of \$17,790, and enjoys considerable support from the local grower community and educators. Project supporters include the San Luis Obispo County Office of Education, the SLO County Farm Bureau, the SLO County Cattle Women, and the California Mid-State Fair.

Database Project for Citrus Pest Management: California Citrus Quality Council, \$19,000

An increasingly complex international system of setting maximum residue limits for pesticides threatens to hamper California's exports of citrus to its trading partners. This grant will allow the industry to develop a database that provides the most up-to-date information on pesticide tolerances, quarantine matters and quality and food safety issues. The resulting system of overlapping matrices will give growers/processors the information they need to choose the appropriate pest and disease control options to maximize export flexibility. The project will develop three comprehensive documents: a crop profile of key pests and their controls; a pest management strategic plan; and a marketing matrix. Other commodity groups may develop similar systems based on this project.

Assessing the Antioxidant Capacity of Sweet Cherries: California Cherry Advisory Board, \$18,000

The board will use this grant, along with matching funds of \$6,000, to assess the antioxidant capacity of sweet cherries and their physiological effects on humans. The results of this research will contribute to domestic and international marketing campaigns. The pilot project's objectives include determining the concentrations of flavonoids and other antioxidant constituents, along with the total antioxidant activity of sweet cherries; and to examine the physiological impact on persons who consume sweet cherries.

Petaluma Youth Agriculture Day: 4th District Agricultural Association, \$13,000

Partnering with the local Petaluma Chamber of Commerce, the Fourth District Agricultural Association will develop and co-host Petaluma Youth Ag Day. The event will feature a number of interactive exhibits targeted at the area's 3,500 students. A second integral component of this grant is a luncheon involving local decision makers. The focus of the discussion will be on the ag/urban interface, particularly relating to water use and a new wastewater treatment plant. This project is also supported by the Petaluma Area Chamber of Commerce and local agricultural producers.